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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/671,731	09/29/2000	Thomas Grassl	JEK/GRASSL	4440
7590 03/17/2006			EXAMINER	
Bacon & Thomas PLLC 625 Slaters Lane 4th Floor Alexandria, VA 22314-1176			GURSHMAN, GRIGORY	
			ART UNIT	PAPER NUMBER
			2132	

DATE MAILED: 03/17/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Notice of Allowability**

Application No.

09/671,731

Applicant(s)

GRASSL ET AL.

Examiner -

Gregory G. Gisham  
Gilberto Barron Jr.

Art Unit

2132

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to telephone conversation with Mr. Benjamin Urcia on March 14, 2006.
2. ☒ The allowed claim(s) is/are 1,3-10 and 12-16.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☐ All    b) ☐ Some\*    c) ☐ None    of the:
    1. ☐ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
  5. ☐ CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.
    - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached
      - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
    - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date \_\_\_\_\_
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date \_\_\_\_\_
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other \_\_\_\_\_

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1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

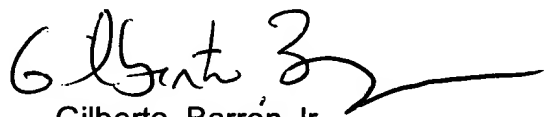
Authorization for this examiner's amendment was given in a telephone interview with Mr. Benjamin Urcia on March 14, 2006.

The application has been amended as follows: Please enter the attached new claim set.

2. The following is an examiner's statement of reasons for allowance: The new claim set reflects corrections of missing antecedent basis, duplicate claims are eliminated, and dependency of certain claims has been corrected.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication should be directed to Gilberto Barron Jr. at telephone number 571-272-3799.

  
Gilberto Barron Jr.  
SPE  
Art Unit 2132

S.N. 09/671,731 (Appl. Thomas Grassl, Filed September 9, 2000)

~~Filed to Examiner Gilberto Barron at 571-273-7799~~

**PROPOSED CLAIM AMENDMENTS**  
(Response to Telephone Conversation on 3/8/06)

~~If the following claims are acceptable, please contact the undersigned by telephone at (703) 683-0500 or by e-mail to [burcia@baconthomas.com](mailto:burcia@baconthomas.com). Thanks.~~

**Listing of Claims:**

1. (Currently Amended) A method for protecting a secured data storage (1), by using sensors (2) to detect an external action on a component, said component containing the secured data storage (1) and an overwritable memory (3), said method comprising the steps of:

determining that an attack has occurred based on undershooting or overshooting of a threshold on one of the sensors (2);

at least partially erasing a content of the secured data storage (1) upon determining that an attack has occurred;

permanently monitoring a status of the sensors (2); and

recording status data of the sensors (2) by storing the status data cyclically in said overwritable memory (3).

2. (Canceled)

3. (Previously Presented) A method according to claim 1, wherein the step of recording said status data comprises the step of storing the status data of the sensors (2) in a nonvolatile memory (4).

4. (Previously Presented) A method according to claim 1, wherein said overwritable memory (3) includes a volatile temporary memory and the step of recording said status data comprises the step of storing the status data of the sensors (2) in a said volatile temporary memory (3) and when

an attack is signaled, transferring the status data contained in the temporary memory (3) to a nonvolatile final memory (4).

5. (Previously Presented) A method according to claim 4, wherein when an attack is signaled at least the status data of the sensor signaling the attack are stored directly in the final memory (4).

6. (Previously Presented) A method according to claim 5, wherein the status data are stored in the temporary memory (3) in digitally coded form, and direct storage of the status data in the final memory (4) is done in analog form when an attack is signaled.

7. (Previously Presented) A method according to claim 1, further comprising the step of, if the a supply voltage (*VCC*) fails, maintaining a power supply to at least one the sensors (2), and/or the secured data storage (1), and/or further components (3, 4, 5, 6, 7) required for carrying out the method protecting the secured data storage with a battery for a certain time period.

8. (Previously Presented) A method according to claim 5, wherein after an attack is signaled the content of the secured data storage (1) is first erased, then the current status data at least of the sensor signaling the attack are stored in the final memory (4), and subsequently the status data contained in the temporary memory (3) are transferred to the final memory (4).

9. (Previously Presented) A method according to claim 1, wherein the step of recording said status data comprises the step of transferring the status data stored in the a temporary memory (3) to the a final memory (4) in reverse chronological order in terms of their age, the status data of the sensor signaling the attack being transferred first and then the status data of the other sensors.

10. (Currently Amended) A security processor, comprising:

a secured data storage (1);

an overwritable memory (3);

sensors (2) for detecting external action on the security processor and/or the secured data storage (1);

a sensor evaluation device (5) which at least partly erases a content of the secured data storage (1) when a threshold is overshoot on one of the sensors (2); and

a data recording device (6) which permanently records the status data of the sensors (2) in ~~an~~ said overwritable memory (3) in which the status data of the sensors (2) is cyclically stored by the data recording device (6).

11. (Canceled)

12. (Previously Presented) A security processor according to claim 10, wherein said memory data recording device further includes a ~~volatile temporary memory (3) in which the status data of the sensors (2) are stored permanently, and a nonvolatile final memory (4) to which the status data contained in the temporary memory (3) are transferred when an attack is signaled.~~

13. (Previously Presented) A security processor according to claim 10, wherein said over-writable memory includes a volatile temporary memory (3) in which the status data of the sensors (2) are stored permanently, and said data recording device further includes a nonvolatile final memory (4) to which the status data contained in the temporary memory (3) are transferred when an attack is signaled.

14. (Previously Presented) A security processor according to claim ~~14~~ 13, further comprising an analog-to-digital converter (7) which digitally codes the analog status data before storage in the volatile temporary memory.

15. (Previously Presented) A security processor according to claim 13, wherein the sensor evaluation device (5) is connected with the final memory (4) and when an attack is signaled at least the status data of the sensor signaling the attack are stored directly in the final memory (4).

16. (Previously Presented) A security processor according to claim ~~1~~ 10, further comprising a battery which maintains a power supply to at least one of the sensors (2), and/or secured data storage (1), and/or sensor evaluation device (5), and/or data recording device (6), and/or data

recording device (6) for the status data of the sensors for a certain time period if the supply voltage (*VCC*) fails.

17-18. (Canceled)